JOINT EXPEDITIONARY FORCE EXPERIMENT 2002

Media Kit

WHAT IS THE JOINT EXPEDITIONARY FORCE EXPERIMENT?

JEFX is a Chief of Staff of the Air Force (CSAF)-sponsored experiment that combines live forces, models, simulations, and technology insertion to create a realistic warfighting environment to explore and evaluate new and promising technologies and processes.

JEFX provides the Air Force a vehicle for experimentation with operational concepts and technologies that enhance capabilities of the 21st Century Aerospace Force. It is a broader effort to implement Joint Vision 2020, exploit the Revolution in Military Affairs and demonstrate emerging Air Force capabilities to deploy and employ decisive aerospace power for the joint force commander.

WHY EXPERIMENTATION?

The United States Air Force Scientific Advisory Board's (SAB) report on United States Air Force Expeditionary Forces, Volume 1: Summary, SAB-TR-97-01, November 1997, supports the concept of JEFX experiments. The SAB report specifically addresses EFX 98; however, its intent applies to all large-scale experiments in general.

The SAB explicitly addressed exercises and experiments. A sampling of the report's recommendations indicates a strong encouragement for JEFX to accomplish several things. First, validate battlespace awareness, directing the collection of intelligence and information in support of forward operations to the maximum extent possible. Second, validate distributed JFACC concepts through "reach back;" and third, demonstrate the feasibility of substituting GPS-based navigation for precision approach radars to enable a "reach back" ATC concept. Additionally, the report recommends validating the use of precision navigation, position, and timing as well as conducting lean sustainment and force protection experiments.

HISTORY

An Air Force Command and Control (C2) summit was conducted 11 April 1997 to examine recommendations by the C2 Task Force to determine the future of Air Force C2. The C2 Task Force introduced a proposed air and space C2 vision and actions required to move Air Force C2 into the 21st Century. The Air Force's senior leadership agreed to four major items at the summit:

- The C2 air and space vision
- Manage C2 as a weapon system
- Implement evolutionary acquisition for C2 systems
- Changes to programs to start achieving the C2 vision.

As part of managing C2 as a weapon system, it was determined that a C2 lead agency should be established to serve as the Air Force focal point to pull Air Force C2 together across all MAJCOMs. Primarily, the agency would:

- Integrate air and space C2
- Eliminate duplication of effort
- Drive toward commonality
- Build an aerospace C2 roadmap to lead Air Force C2 into the 21st Century.

The CSAF directed the Commander of Air Combat Command to establish the Aerospace Command and Control & Intelligence, Surveillance and Reconnaissance Center (AC2ISRC). The CSAF directed the AC2ISRC to develop and manage a series of experiments called Joint Expeditionary Force Experiment, to explore emerging technologies, processes and requirements to strengthen Air Force capabilities into the next millennium.

The Air Force Experimentation Office was also established in the same order to synchronize the experimentation process across the Air Force and to be the focal point for the Air Force's contribution to joint experimentation. The AFEO will also coordinate experimentation activities in JEFX, exercises, wargaming, and the Air Force battle labs, and facilitate the assessment of each of those activities to ensure an integrated process for Air Force experimentation and prevent duplication of effort.

Through a partnership between the AFEO, AFC2TIG, the Electronic Systems Center at Hanscom AFB, all Air Force Major Commands, numerous federal agencies, and industry, EFX 98 became the Air Forces' first large-scale experiment. With a focus on distributed operations, it explored the ability to move information while deploying fewer people and less equipment to maintain the situational awareness of our commanders and fighting forces as they deployed to forward areas of operations. JEFX 99 built upon the lessons learned in the '98 experiment to better integrate our space partners and space resources into the expeditionary aerospace operations. It also attempted to integrate our coalition partners into AOC operations. JEFX 00 focused on Agile Combat Support initiatives to support and protect our troops in the field; Global Mobility to transport and sustain Aerospace Expeditionary Forces; Time Critical Targeting capabilities to strike the right targets at the right time and in the correct sequence to achieve the desired effect; Intelligence, Surveillance and Reconnaissance Management to give commanders timely battle space information; Joint Battlespace Infosphere initiatives designed to turn data into knowledge for the warfighter.

JEFX 2002 DESCRIPTION

JEFX 2002 is an opportunity to discover better ways to accomplish Air Force missions in a joint environment. JEFX 2002 provides a realistic environment of simulations and live-fly forces into which advanced technology and innovative processes are introduced and evaluated to determine their potential for enhancing Air Force Core Competencies. This will create a dynamic and exciting operational environment for our warfighters to explore seven process and technology initiatives:

- THEATER SPACE CONTROL (CLASSIFIED) -- Provides the JFACC with tactical control of space assets

- PREDICTIVE BATTLESPACE AWARENESS (PBA) -- PBA enables the COMAFFOR/JFACC and staff to correctly anticipate future conditions, assesses changing conditions, establish priorities and exploit emerging opportunities while mitigating the impact of unexpected adversary actions.

- MASTER AIR ATTACK PLAN (MAAP) TOOLKIT -- Optimizes MAAP process by providing all air and space information needed in one interface rather than multiple divergent applications.

- SUTER II (CLASSIFIED) -- Compresses the front end of the TCT kill-chain by coordinating the operation of ISR sensors to identify and geo-located mobile high-value SAMs and associated C2 nodes, and generate actionable information for the TCT cell and lethal and non-lethal shooters.

- PANTHER DEN (CLASSIFIED) -- Provides JFACC additional IO capability and increased IO awareness

- SPECIAL OPERATIONS FORCES (SOF) BLUE FORCE TRACKING/ SPECIAL TEAM SENSOR (BFT/STS) – Automated tagged, tracking, locating (TTL) and two-way messaging of Blue/Alliances forces via OTH/LOS for TCT and C4ISR. Aids Combat-ID, SOF, BDA, PR/CSAR etc. Lets CAOC and ST users reach-out, query on-scene forces, request action or ISR in either direction. Location data fused into COP.

- COMBAT RESCUE 2007 -- Integrates Combat Air Forces rescue systems and processes within the dynamic command, control, communications, computer (C4) ISR collaborative environment at the operational and tactical level of command and control (C2). The objective is to assign survivor/evaders (S/E) as a time-critical-target (TCT) and prosecute combat rescue missions within TCT processes.

MAJOR OPERATIONAL NODES FOR JEFX 2002

Several Air Forces sites across the United States are connected through an electronic “Global Information Grid” network to successfully accomplish JEFX 02. They include:

The Joint Air and Space Air Operations Center (JAOC) at Nellis AFB, NV, will be the focal point of JEFX02, and the site from which the air war will be run.

The Air Force Space Operations Center, at Vandenberg AFB, CA integrates support from space sensors and communications satellites and knowledge of the adversaries’ space capabilities into CAOC operations.

The Air Intelligence Agency at Kelly AFB, TX and the Air Force Weather Agency at Offutt AFB, NE provide intelligence and weather information to the distributed operations network and integration into ATO planning and execution.

For further information or to arrange interviews with subject matter experts, please contact us at: 757-225-2109 COMM (575-2109 DSN) or visit our website at https://jefxlink.langley.af.mil